CLAIMS

1. A communication system, comprising an SDH network and an Ethernet network, the SDH network having an SDH network management system to monitor the functionality of network elements in the SDH network, the SDH network being arranged to transport at least Ethernet information in SDH format across the SDH network, the SDH network being at least partially situated at a host site and the Ethernet network being situated at a user site, the SDH network comprising a SDH network element arranged to convert the SDH format Ethernet information into Ethernet format information for transportation between the host and user sites via a link between the host and user sites, and the Ethernet network comprising a Ethernet network element to receive the Ethernet format information, wherein the SDH network element can request the status of the Ethernet network element when the SDH network element is required to update the SDH network management system with status information on the functionality of the SDH network element and/or Ethernet network element.

2. A communication system, as claimed in Claim 1, wherein the SDH network element comprises network termination equipment.

3. A communication system, as claimed in Claim 2, wherein the network termination equipment comprises an SDH multiplexer and an associated

Ethernet conversion card.

4. A communication system, as claimed in any preceding claim, wherein the SDH network element is arranged to request the status of the Ethernet network element by transmitting the request for status within the format of an Ethernet frame transported over the link.

5. A communication system, as claimed in Claims 1 to 3, wherein the SDH network element is arranged to request the status of the Ethernet network element by transmitting the request for status between successive Ethernet frames transported over the link.

6. A communication system, as claimed in either Claim 4 or Claim 5, wherein the Ethernet network element is arranged to provide a response to the request for status from SDH network element by transmitting the response within the format of an Ethernet frame transported over the link.

7. A communication system, as claimed in either Claim 4 or Claim 5, wherein the Ethernet network element is arranged to provide a response to the request for status from SDH network element by transmitting the response between successive Ethernet frames transported over the link.

8. A communication system, as claimed in any preceding claim, wherein the Ethernet network element is arranged to provide status information to the

SDH network element by transmitting the status information within the format of an Ethernet frame transported over the link.

9. A communication system, as claimed in Claims 1 to 7, wherein the Ethernet network element is arranged to provide status information to the SDH network element by transmitting the status information between successive Ethernet frames transported over the link.

10. A communication system, as claimed in any preceding claim, wherein the SDH network element is arranged to issue an instruction to the Ethernet network element by transmitting the instruction within the format of an Ethernet frame transported over the link.

11. A communication system, as claimed in Claims 1 to 9, wherein the SDH network element is arranged to issue an instruction to the Ethernet network element by transmitting the instruction between successive Ethernet frames transported over the link.

12. A communication system, as claimed in any preceding claim, wherein the link is a point-to-point optical link.

13. A communication system, as claimed in any preceding claim, wherein the Ethernet network element comprises an opto-electrical converter.

14. A communication system, as claimed in any preceding claim, wherein the SDH network element is further arranged to convert Ethernet format information received from the Ethernet network into SDH format information for transportation across the SDH network.

15. A Communication system substantially as illustrated in and/or described with reference to the accompanying drawings.

16. A method of communicating for a SDH network and an Ethernet network, the method comprising monitoring the functionality of network elements in the SDH network using an SDH network management system, arranging the SDH network to transport at least Ethernet information in SDH format across the SDH network, situating the SDH network at least partially at a host site and situating the Ethernet network at a user site, arranging a SDH network element of the SDH network to convert the SDH format Ethernet information into Ethernet format information and transporting the Ethernet format information between the host and user sites via a link between the host and user sites, and receiving the Ethernet format information with a Ethernet network element at the Ethernet network, whereby the SDH network element can request the status of the Ethernet network element when the SDH network element is required to update the SDH network management system with status information on the functionality of the SDH network element and/or Ethernet network element.

17. A method of communicating substantially as illustrated in and/or described with reference to the accompanying drawings.

18. A communication system, comprising an first network and a second network, the first network having an network management system to monitor the functionality of network elements in the first network, the first network being arranged to transport at least some information intended for the second network across the first network in a format compatible with the first network, the first network being at least partially situated at a host site and the second network being situated at a user site, the first network comprising a network element arranged to convert the format of the information intended for the second network into second network format information compatible with the second network for transportation between the host and user sites via a link between the host and user sites, and the second network comprising a network element to receive the second network format information wherein the network element of the first network can request the status of the network element of the second network when the network element of the first network is required to update the network management system of first network with status information on the functionality of the network element of the first network and/or the network element of the second network.

19. A method of communicating for a first network and a second network, the method comprising monitoring the functionality of network elements in the

first network using a network management system, arranging the first network to transport at least some information intended for the second network across the first network in a format compatible with the first network, situating the first network at least partially at a host site and situating the second network at a user site, arranging a network element of the first network to convert the format of the information intended for the second network into second network format information compatible with the second network and transporting the second network format information between the host and user sites via a link between the host and user sites, and receiving the second network format information at the second network with a network element of the second network, whereby the network element of the first network can request the status of the network element of the second network when the network element of the first network is required to update the network management system of first network with status information on the functionality of the network element of the first network and/or the network element of the second network.